RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH
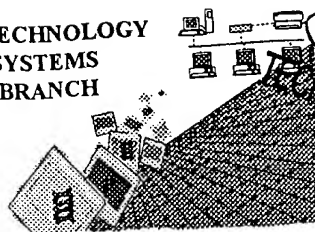
The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/581,241A_

Source: _1600_

Date Processed by STIC: _3/19/2003_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: **patin21help@uspto.gov** or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: **patin3help@uspto.gov** or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Doc. 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002

[handwritten top-left] Insert these MANDATORY headings AND respond for a U.S. case

[handwritten top-right annotations]
Does Not Comply
Corrected Diskette Needed

The submitted disk had two files on it.

Per 1.824 f Sequence Rules,

"The computer readable form shall contain a single 'Sequence Listing'..."

Submit one file ONLY

SEQUENCE LISTING

[top-right column]
(i) GENERAL INFORMATION:
  (i) APPLICANT:
  (ii) TITLE OF INVENTION:
  (iii) NUMBER OF SEQUENCES:
  (iv) CORRESPONDENCE ADDRESS:
    (A) ADDRESSEE:
    (B) STREET:
    (C) CITY:
    (D) STATE:
    (E) COUNTRY:
    (F) ZIP:
  (v) COMPUTER READABLE FORM:
    (A) MEDIUM TYPE:
    (B) COMPUTER:
    (C) OPERATING SYSTEM:
    (D) SOFTWARE:
  (vi) CURRENT APPLICATION DATA:
    (A) APPLICATION NUMBER:
    (B) FILING DATE:

(2) INFORMATION FOR SEQ ID NO:1:
    SEQ ID NO: 1   (i) SEQUENCE CHARACTERISTICS:
    (A) SEQUENCE LENGTH: 21
    (B) SEQUENCE TYPE: nucleic acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: Other nucleic acid
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
    CTC TAG CAT GCG AAA ATC TAG   21 ← insert

(2) INFORMATION FOR SEQ ID NO:2:
    SEQ ID NO: 2   (i) SEQUENCE CHARACTERISTICS:
    (A) SEQUENCE LENGTH: 20
    (B) SEQUENCE TYPE: nucleic acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: Other nucleic acid
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
    CTG CAG GCC TGC AAG CTT GG   20 ←

(2) INFORMATION FOR SEQ ID NO:3:
    SEQ ID NO: 3   (i) SEQUENCE CHARACTERISTICS:
    (A) SEQUENCE LENGTH: 21
    (B) SEQUENCE TYPE: nucleic acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: Other nucleic acid
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:
    ATC CTT TGT ATT TGA TTA AAG   21 ←

(2) INFORMATION FOR SEQ ID NO:4:
    SEQ ID NO: 4   (i) SEQUENCE CHARACTERISTICS:
    (A) SEQUENCE LENGTH: 20
    (B) SEQUENCE TYPE: nucleic acid
    (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear
    (ii) MOLECULE TYPE: Other nucleic acid
    (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:
    TCT AGA GTC GAC CTG CAG GC   20 ←

(2) INFORMATION FOR SEQ ID NO:5:
    SEQ ID NO: 5   (i) SEQUENCE CHARACTERISTICS:
    (A) SEQUENCE LENGTH: 552
    (B) SEQUENCE TYPE: amino acid
    (D) TOPOLOGY: OK linear
    (ii) MOLECULE TYPE: peptide
    (vi) ORIGINAL SOURCE: (Luciola cruciata and Photinus pyralis)   *[handwritten: invalid — do not insert a response to (vi) ORIGINAL SOURCE:]*
    SEQUENCE DESCRIPTION:
    Met Glu Asn Met Glu Asn Asp Glu Asn Ile Val Val Gly Pro Lys
                                                              15
                     5   *[handwritten: delete all these]*   10
    Pro Phe Tyr Pro Ile Glu Glu Gly Ser Ala Gly Thr Gln Leu Arg
            20   25   30
    Lys Tyr Met Glu Arg Tyr Ala Lys Leu Gly Ala Ile Ala Phe Thr
                              35   40   45
    Asn Ala Val Thr Gly Val Asp Tyr Ser Tyr Ala Glu Tyr Leu Glu
                              50   55   60
    Lys Ser Cys Cys Leu Gly Lys Ala Leu Gln Asn Tyr Gly Leu Val
                              65   70   75
    Val Asp Gly Arg Ile Ala Leu Cys Ser Glu Asn Cys Glu Glu Phe
                              80   85   90

[handwritten right margin] insert these on one of the subheadings

(see sample of Sequence Listing, attached in back)

[handwritten bottom] delete all of these format markers throughout Sequence Listing

(2) INFORMATION FOR SEQ ID NO: 11:

~~SEQ ID NO: 11~~   → (i) SEQUENCE CHARACTERISTICS:

(A) ~~SEQUENCE~~ LENGTH: 21
(B) ~~SEQUENCE~~ TYPE: nucleic acid
(C) STRANDEDNESS: single
(D) TOPOLOGY: linear
(ii) MOLECULE TYPE: other nucleic acid
(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
AGAGATCCAATTTATGGAAAC

insert a space after each group of 10 nucleotides

in a non-coding sequence

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

These pages.
shown on a sample

Many errors in submitted file

Please! Consult Sequence Rules
and consult sample Sequence Listing
(attached)

(3) Computer: Apple Macintosh;

(i) Operating System: Macintosh;

(ii) Macintosh File Type: text with line termination

(iii) Line Terminator: Pre-defined by text type file;

(iv) Pagination: Pre-defined by text type file;

(v) End-of-file: Pre-defined by text type file;

(vi) Media: (A) Diskett—3.50 Inch, 400 Kb storage;

(B) Diskette—3.50 Inch, 800 Kb storage;

(C) Diskette—3.50 Inch, 1.4 Mb storage;

(vii) Print Command: Use PRINT command from any Macintosh Application that processes text files, such as MacWrite or Teach Text;

(4) Magnetic tape: 0.5 Inch, up to 2400 feet;

(i) Density: 1600 or 6250 bits per inch, 9 track;

(ii) Format: raw, unblocked;

(iii) Line Terminator: ASCII Carriage Return plus optional ASCII Line Feed;

(iv) Pagination: ASCII Form Feed or Series of Line Terminators;

(v) Print Command (Unix shell version given here as sample response—mt/dev/rmt0; lpr/dov/rmt0):

(g) Computer readable forms that are submitted to the Office will not be returned to the applicant.

(h) All computer readable forms shall have a label permanently affixed thereto on which has been hand printed or typed, a description of the format of the computer readable form as well as the name of the applicant, the title of the invention, the date on which the data were recorded on the computer readable form and the name and type of computer and operating system which generated the files on the computer readable form. If all of this information cannot be printed on a label affixed to the computer readable form, by reason of size or otherwise, the label shall include the name of the applicant and the title of the invention and a reference number, and the additional information may be provided on a container for the computer readable form with the name of the applicant, the title of the invention, the reference number and the additional information affixed to the container. If the computer readable form is submitted after the date of filing under 35 U.S.C. 111, after the date of entry in the national stage under 35 U.S.C. 371 or after the time of filing, in the United States Receiving Office, an international application under the PCT, the labels mentioned herein must also include the date of the application and the application number, including series code and serial number.

§ 1.825 Amendments to or replacement of sequence listing and computer readable copy thereof.

(a) Any amendment to the paper copy of the "Sequence Listing" (§ 1.821(c)) must be made by the submission of substitute sheets. Amendments must be accompanied by a statement that indicates support for the amendment in the application, as filed, and a statement that the substitute sheets include no new matter. Such a statement must be a verified statement if made by a person not registered to practice before the Office.

(b) Any amendment to the paper copy of the "Sequence Listing," in accordance with paragraph (a) of this section, must be accompanied by a substitute copy of the computer readable form (§ 1.821(e)) including all previously submitted data with the amendment incorporated therein, accompanied by a statement that the copy in computer readable form is the same as the substitute copy of the "Sequence Listing." Such a statement must be a verified statement if made by a person not registered to practice before the Office.

(c) Any appropriate amendments to the "Sequence Listing" in a patent, e.g., by reason of reissue or certificate of correction, must comply with the requirements of paragraphs (a) and (b) of this section.

(d) If, upon receipt, the computer readable form is found to be damaged or unreadable, applicant must provide, within such time as set by the Commissioner, a substitute copy of the data in computer readable form accompanied by a statement that the substitute data is identical to that originally filed. Such a statement must be a verified statement if made by a person not registered to practice before the Office.

Appendix A—Sample Sequence Listing

(1) GENERAL INFORMATION:

(i) APPLICANT: Doe, Joan X, Doe, John Q

(ii) TITLE OF INVENTION: Isolation and Characterization of a Gene Encoding a Protease from *Paramecium* sp.

(iii) NUMBER OF SEQUENCES: 2

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Smith and Jones

(B) STREET: 123 Main Street

(C) CITY: Smalltown

(D) STATE: Anystate

(E) COUNTRY: USA

(F) ZIP: 12345

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: Diskette, 3.50 Inch, 800 Kb storage

(B) COMPUTER: Apple Macintosh

(C) OPERATING SYSTEM: Macintosh 5.0

(D) SOFTWARE: MacWrite

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER: 00/890,999

(B) FILING DATE: 28-FEB-1989

(C) CLASSIFICATION: 900/99

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER: PCT/US88/99999

(B) FILING DATE: 01-MAR-1988

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Smith, John A.

(B) REGISTRATION NUMBER: 00001

(C) REFERENCE/DOCKET NUMBER: 01-0001

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: (909) 999-0001

(B) TELEFAX: (909) 999-0002

(2) INFORMATION FOR SEQ ID NO: 1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 954 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: genomic DNA

(iii) HYPOTHETICAL: yes

(iv) ANTI-SENSE: no

(vi) ORIGINAL SOURCE:

(A) ORGANISM: Paramecium sp

(C) INDIVIDUAL/ISOLATE: XYZ2

(C) CELL TYPE: unicellular organism

(vii) IMMEDIATE SOURCE:

(A) LIBRARY: genomic

(B) CLONE: Para-XYZ2/38

(x) PUBLICATION INFORMATION:

(A) AUTHORS: Doe, Joan X, Doe, John Q

(B) TITLE: Isolation and Characterization of a Gene Encoding a Protease from *Paramecium* sp.

(C) JOURNAL: Fictional Genes

(D) VOLUME: 1

(E) ISSUE: 1

(F) PAGES: 1-20

(G) DATE: 02-MAR-1988

(K) RELEVANT RESIDUES IN SEQ ID NO: 1: FROM 1 TO 954

(2) INFORMATION FOR SEQ ID NO: 2:
(i) SEQUENCE CHARACTERISTICS:
   (A) LENGTH: 82 amino acids
   (B) TYPE: amino acid
   (D) TOPOLOGY: linear
(ii) MOLECULE TYPE: protein
(ix) FEATURE:
   (A) NAME/KEY: signal sequence
   (B) LOCATION: -34 to -1

(C) IDENTIFICATION METHOD: similarity
   to other signal sequences. hydrophobic
(D) OTHER INFORMATION: expresses
   protease
(x) PUBLICATION INFORMATION:
   (A) AUTHORS: Doe, Joan X. Doe, John Q
   (B) TITLE: Isolation and Characterization
   of a Gene Encoding a Protease from
   Paramecium sp.

(C) JOURNAL: Fictional Genes
(D) VOLUME: 1
(E) ISSUE: 1
(F) PAGES: 1-20
(G) DATE: 02-MAR-1988
(K) RELEVANT RESIDUES IN SEQ ID NO:
   2: FROM -34 TO 48

BILLING CODE 3510-14-M

Here's where sequence 2 starts (after
the sequence data of SEQ ID NO:1:)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

ATCGGGATAG TACTGGTCAA GACCGGTGGA CACCGGTTAA CCCCGGTTAA GTACGGGTTA 60

TAGGCCATTT CAGGCCAAAT GTGCCCAACT ACGCCAATTG TTTTGCCAAC GGCCAACGTT 120

ACGTTCGTAC GCACGTATGT ACCTAGGTAC TTACGGACGT GACTACGGAC ACTTCCGTAC 180

GTACGTACGT TTACGTACCC ATCCCAACGT AACCACAGTG TGGTCGCAGT GTCCCAGTGT 240

ACACAGACTG CCAGACATTC TTCACAGACA CCCC ATG ACA CCA CCT GAA CGT CTC 295
                                   Met Thr Pro Pro Glu Arg Leu
                                                        -30

TTC CTC CCA AGG GTG TGT GGC ACC ACC CTA CAC CTC CTC CTT CTG GGG 343
Phe Leu Pro Arg Val Cys Gly Thr Thr Leu His Leu Leu Leu Leu Gly
       -25   -20   -15

CTG CTG CTG GTT CTG CTG CCT GGG GCC CAT GTGAGGCAGC AGGAGAATGG 393
Leu Leu Leu Val Leu Leu Pro Gly Ala His
       -10   -5

GGTGGCTCAG CCAAACCTTG AGCCCTAGAG CCCCCCTCAA CTCTGTTCTC CTAG GGG 450
                                                            Gly

CTC ATG CAT CTT GCC CAC AGC AAC CTC AAA CCT GCT GCT CAC CTC ATT 498
Leu Met His Leu Ala His Ser Asn Leu Lys Pro Ala Ala His Leu Ile
1   5   10   15

GTAAACATCC ACCTGACCTC CCAGACATGT CCCCACCAGC TCTCCTCCTA CCCCTGCCTC 558

AGGAACCCAA GCATCCACCC CTCTCCCCCA ACTTCCCCCA CGCTAAAAAA AACAGAGGGA 618

GCCCACTCCT ATGCCTCCCC CTGCCATCCC CCAGGAACTC AGTTGTTCAG TGCCCACTTC 678

TAC CCC AGC AAG CAG AAC TCA CTG CTC TGG AGA GCA AAC ACG GAC CGT 726
Tyr Pro Ser Lys Gln Asn Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg
            20   25   30

GCC TTC CTC CAG GAT GGT TTC TCC TTG AGC AAC AAT TCT CTC CTG GTC 774
Ala Phe Leu Gln Asp Gly Phe Ser Leu Ser Asn Asn Ser Leu Leu Val
        35   40   45   —

TAGAAAAAAT AAATTGATTTC AAGACCTTCT CCCCATTCTG CCTCCATTCT GACCATTTCA 834

GGGGTCGTCA CCACCTCTCC TTTGGCCATT CCAACAGCTC AAGTCTTCCC TGATCAAGTC 894

ACCGGAGCTT TCAAAGAAGG AATTCTAGGC ATCCCAGGGG ACCCACACCT CCCTGAACCA 954

BILLING CODE 3510-16-C

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Thr Pro Pro Glu Arg Leu Phe Leu Pro Arg Val Cys Gly Thr Thr
          -30   -25   -20

Leu His Leu Leu Leu Leu Gly Leu Leu Leu Val Leu Leu Pro Gly Ala
          -15   -10   -5

His Gly Leu Met His Leu Ala His Ser Asn Leu Lys Pro Ala Ala His
      1   5   10

Leu Ile Tyr Pro Ser Lys Gln Asn Ser Leu Leu Trp Arg Ala Asn Thr
15   20   25   30

Asp Arg Ala Phe Leu Gln Asp Gly Phe Ser Leu Ser Asn Asn Ser Leu
          35   40   45

Leu Val

BILLING CODE 3510-16-C